

WHAT IS CLAIMED IS:

1 1. A method for aircraft telecommunications comprising the steps of:
2 identifying a current service volume;
3 identifying an available VHF communications channel frequency from a table
4 of preferred VHF communications frequencies associated with said current service volume;
5 selecting a preferred communications attribute from a table of attributes
6 associated with said current service volume and according to said available VHF
7 communications channel frequency; and
8 effecting airborne communications utilizing said preferred communications
9 attribute.

1 2. The method of claim 1 wherein said predefined service volumes comprise
2 geographic regions other than rectangular regions.

1 3. The method of claim 1 wherein said service volumes further include at
2 least one subset of area.

1 4. The method of claim 1 wherein said step of selecting a preferred
2 communications attribute includes the step of selecting a VHF communications channel.

1 5. The method of claim 1 wherein said step of selecting a preferred
2 communications attribute includes the step of selecting a SATCOM communications channel.

1 6. The method of claim 1 wherein said step of selecting a preferred
2 communications attribute includes the step of selecting an HF communications channel.

1 7. The method of claim 1 further comprising the step of manually selecting a
2 second preferred communications attribute different than said preferred communications
3 attribute.

1 8. The method of claim 1 wherein said step of identifying a current
2 service volume further comprises the steps of:

3 determining a current aircraft position; and

4 comparing said current aircraft position with a set of predefined service
5 volumes to identify the current service volume encompassing said current aircraft position.

1 9. A method for aircraft telecommunications comprising the steps of:
2 defining a plurality of service volumes having nonrectangular boundaries;
3 associating a set of preferred communications attributes with each of said
4 plurality of service volumes;
5 identifying a current service volume;
6 selecting a preferred communications attribute from said set of preferred
7 communications attributes associated with said current service volume; and
8 effecting airborne communications utilizing said preferred communications
9 attribute.

1 10. The method of aircraft telecommunications of claim 9 wherein said
2 step of selecting a preferred communications attribute further comprises the step of selecting
3 a preferred communications channel.

1 11. The method of aircraft telecommunications of claim 9 wherein said
2 step of defining a plurality of service volumes further comprises the step of defining at least
3 one area located within at least one service volume.

1 12. The method of aircraft telecommunications of claim 9 wherein said
2 step of identifying a current service volume comprises the step of identifying a current
3 position of the aircraft.

1 13. A computer program product for use on an aircraft, the computer
2 program product comprising:

3 a computer readable storage medium having computer readable program code
4 means embodied in said medium, said computer readable program code means comprising:

5 a first computer instruction means for identifying a current service
6 volume to be used for airborne communications;

7 a second computer instruction means for identifying an available VHF
8 communications channel frequency from a table of preferred VHF communications
9 frequencies associated with said current service volume;

10 a third computer instruction for selecting a preferred communications
11 attribute from a table of attributes associated with said current service volume and according
12 to said available VHF communications channel frequency; and

13 a fourth computer instruction means for effecting airborne
14 communications utilizing said preferred communications attribute.

1 14. The computer program product of claim 13 wherein said first computer
2 instruction means further includes a fifth computer instruction means for reading a current
3 position of the aircraft.

1 15. The computer program product of claim 13 wherein said fourth
2 computer instruction means selects a preferred communications channel.

1 16. The computer program product of claim 13 wherein said first computer
2 instruction means further includes a fifth computer instruction means for identifying a current
3 service area located within said current service volume.

1 17. A communications apparatus for effecting airborne communications
2 comprising:

3 an input for receiving a message to be transmitted from an aircraft;

4 a logic device for identifying a preferred communications attribute to be
5 utilized in transmitting said message as a function of: a service volume; and at least one of a
6 VHF frequency preference and a channel preference; and

7 a router for effecting airborne communications according to said preferred
8 communications attribute.

1 18. The communications apparatus of claim 17 wherein said logic device
2 comprises a computer readable medium.

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19. The communications apparatus of claim 18 wherein said computer readable medium comprises a PCMCIA card.

20. The communications apparatus of claim 17 wherein said logic device comprises a programmable logic device.

21. The communications apparatus of claim 17 wherein said input is coupled to receive a position information of the aircraft and wherein said preferred communications attribute is determined according to said position information.

22. The communications apparatus of claim 17 further comprising a controller useful for controlling display of communications information on a cockpit display.

23. The communications apparatus of claim 17 wherein said apparatus comprises a CMU.

24. The communications apparatus of claim 17 wherein said apparatus comprises an Air Traffic Service Unit (ATSU).

25. The communications apparatus of claim 17 wherein said apparatus comprises a Data Management Unit (DMU).

26. The communications apparatus of claim 7 wherein said apparatus comprises an Airborne Communications Addressing and Reporting System (ACARS) Management Unit.